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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF

September 21, 2004

Roy Ball
Environ Corporation
740 Waukegan Road
Suite 401
Deerfield, IL 60015

Re: Screening Level Ecological Risk Assessment

Dear Roy:

I have received the following document, which was revised in accordance with EPA comments, prepared for the Eagle Zinc site. The revised document addresses the majority of the Agency comments but the following issues remain:

Additional documentation is needed in the SLERA for habitat quality and the level of biological impairment in the on-site drainage ways because the hazard quotients calculated for these areas are very high. Hazard quotients based on acute (surface water), severe (sediment), and low effect (piscivores) ecological screening values were observed that exceeded 10 at several locations in the Western drainage way (before the confluence) and Eastern drainage way (to the most downstream location). Habitat quality was described as poor in the SLERA but given that the HQ's were so high, additional documentation is required to support the conclusion that chemical impacts are negligible compared to the physical impacts. This documentation should include additional habitat quality/biological data from within these drainage ways.

The language in the SLERA should also be changed to state that the conclusions presented therein are based on current conditions. Because high magnitude HQ's were observed in the drainage ways, an increase in the quality of habitat would amplify the associated ecological risks. Please modify the text to reflect that these calculations are based on current conditions at the site.

Specific calculation comments

Page 51 Section 4.2.3. Surrogate receptors-mink and green heron. Step 3A concluded that the mink is unlikely to access the pond in the western drainage way, risks to the mink are negligible. Risks are still present for the other mammalian piscivores that do not have this access limitation.

Table 2-1a. The ILH2O acute ESVs for nickel and zinc are incorrectly calculated.

Table 2-1b. The equation for acute dissolved Pb is repeated twice.

Table 3-3a. The header for most sensitive piscivore NOAEL-based ESV is missing a reference to (b) in the notes section.

Table 3-5b. The direct contact and piscivore water/diet HQs for the western background are incorrect.

Table 4-3c. The SLERA and acute ESVs are flipped on page 2 of 2 from the table (calculations on this page are correct, however, using the ESVs from page 1 of 2).

Table 4-4b. NOAA PELs are different between pages 1 and 2 of the table. NOAA PELs on page 2 are incorrect.

Appendix D tables. The ingestion rates for the terrestrial receptors are described as based on allometric equations but the values given were derived from the Wildlife Exposure Handbook (EPA 1993).

Table D-2c. Mammal ingestion lists invertebrate and plant ingestion variables.

This document is approved with the comments listed above. Please submit the revised pages to the SLERA by October 5, 2004.

If you have any questions, please contact me.

Sincerely yours,

Dion Novak

Dion Novak
Remedial Project Manager

cc: C. English, CH2M Hill
R. Lanham, IEPA
T. Krueger, EPA